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EXAMINER

BLAIR, DOUGLAS B

ART UNIT PAPER NUMBER

2142

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/845,104

Applicant(s)

TREDOUX ET AL

Examiner

Douglas B. Blair

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims 1-23 are currently pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent Number 6,345,300 to Bakshi et al..

4. As to claim 1, Bakshi teaches a reverse proxy network communication scheme comprising: a proxy agent located inside a protected network addressable by at least one internal network device, the proxy agent establishing outgoing network connections (col. 2, lines 36-65); a security device through which all traffic between the protected network and external networks must travel, the security device permitting at least outgoing connections via at least one predetermined network protocol (col. 2, lines 36-65); an external proxy server outside the protected network and reachable by the proxy agent via outgoing network connections through the security device, the external proxy server also being addressable by at least one external

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network device, thereby allowing communication between the at least one external network device and the at least one internal network device (col. 3, line 31-col. 4, line 5).

5. As to claim 2, Bakshi teaches the scheme of claim 1 wherein the at least one predetermined network protocol is HTTP (col. 3, lines 56-65).

6. As to claim 3, Bakshi teaches the scheme of claim 1 further including an outgoing proxy server in communication with the agent and which the proxy agent used to establish outgoing connections (col. 2, lines 36-65, the firewall proxy or the transcoding server could be considered such an outgoing server).

7. As to claim 4, Bakshi teaches the scheme of claim 1 wherein the external proxy server is in communication with at least one other network, receives, and stores data addressed to the at least one internal network device (col. 3, line 31-col. 4, line 5).

8. As to claim 5, Bakshi teaches the scheme of claim 4, wherein the proxy agent polls the external proxy server to check for data addressed to the at least one internal network device (col. 5, lines 5-45).

9. As to claim 6, Bakshi teaches the scheme of claim 5 wherein the proxy agent downloads data addressed to the at least one internal network device from the external proxy server and forwards the data to the at least one internal network device (col. 4, line 31-col. 5, line 4).

10. As to claim 7, Bakshi teaches the scheme of claim 4 wherein the external proxy server ensures proper cookie routing (col. 3, line 31-col. 4, line 5).

11. As to claim 8, Bakshi teaches the scheme of claim 1, wherein the proxy agent forwards outgoing data to the external proxy server, which transmits the data to the at least one external network device (col. 2, lines 36-65).

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12. As to claim 9, Bakshi teaches a method of accessing an internal network device on a protected network, the network including a security device, the method comprising: storing data addressed to the internal network device in an external proxy server (col. 2, lines 36-65); maintaining a proxy agent on the protected network, the proxy agent executing the step of: polling the external proxy server for data addressed to the internal network device (col. 4, line 31-col. 5, line 4); forwarding to the internal network device any data on the external proxy server and addressed to the internal network device (col. 3, line 31-col. 4, line 5); and forwarding to the external proxy server any data addressed to an external device in communication with the external proxy server (col. 2, lines 36-65).

13. As to claim 13, Bakshi teaches the method of claim 9 further including multiplexing multiple requests from the proxy agent to the external proxy server through the same connection (col. 4, line 31-col. 5, line 4).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,345,300 to Bakshi et al. in view of U.S. Patent Number 6,510,464 to Grantges, Jr. et al..

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16. As to claim 22, Bakshi teaches the scheme of claim 1, however Bakshi does not explicitly teach a scheme for providing network administrators control over the ability to allow and deny entry on a per session basis.

Grantges teaches a method for providing network administrators control over the system including granting administrators the ability to allow and deny entry into the protected network on a per session basis (col. 7, line 63-col. 8, line 14).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Bakshi regarding the use of a proxy agent to contact an external proxy with the teachings of Grantges regarding control by administrators of sessions because such control allows administrators the control user authentication (Grantges, col. 7, line 63-col. 8, line 14).

17. As to claim 23, Grantges teaches a method wherein access is conferred by granting a key with a predetermined life span (col. 7, lines 63-col. 8, line 14).

18. Claims 11-12 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,345,300 to Bakshi et al. in view of U.S. Patent Number 5,673,322 to Pepe et al..

19. As to claim 11, Bakshi teaches the method of claim 9; however Bakshi does not explicitly teach communicating by the internal network device with the external proxy server using a first network protocol and the external network device communicates with the external proxy server using a second network protocol.

Pepe teaches communicating by the internal network device with the external proxy server using a first network protocol and the external network device communicates with the external proxy server using a second network protocol (col. 8, lines 16-25).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Bakshi regarding the use of a proxy agent to contact an external proxy with the teachings of Pepe regarding communicating using differing protocols between an internal and external device because a user may want to use encryption for security reasons (Pepe, col. 8, lines 16-25).

20. As to claim 12, Pepe teaches a method wherein data addressed to the internal network device using the second network protocol is transmitted to the internal device using the first network protocol so that the second network protocol is carried to the internal network device inside the first network protocol (col. 8, lines 16-25).

21. As to claim 17, Bakashi teaches the method of claim 9, however Bakashi does not explicitly teach returning a stream of spurious bytes if nothing is pending.

Pepe teaches a method wherein polling comprises connecting the external proxy server to check for pending traffic; returning a stream of spurious bytes ignored by the proxy agent if there is nothing pending (col. 8, lines 26-60); immediately transmitting data from the external proxy server to the proxy agent when the external proxy server receives data from a client, thus closing the connection to flush any buffering performed by intervening proxy servers (col. 8, lines 26-60).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Bakshi regarding the use of a proxy agent to

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contact an external proxy with the teachings of Pepe regarding returning a stream of spurious bytes if nothing is pending because such a polling method would improve performance (Pepe, col. 8, lines 26-60).

22. As to claim 18, Bakshi teaches the method of claim 9, however Bakshi does not explicitly teach a method wherein communication between the proxy agent and the external proxy server is encrypted.

Pepe teaches a method wherein communication between the proxy agent and the external proxy server is encrypted (col. 10, lines 29-37).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Bakshi regarding the use of a proxy agent to contact an external proxy with the teachings of Pepe regarding the use of encryption because encryption is commonly used in secure networking (Pepe, col. 10, lines 29-37).

23. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,345,300 to Bakshi et al. in view of U.S. Patent Number 5,673,322 to Pepe et al. in further view of U.S. Patent Number 6,510,464 to Grantges, Jr. et al.:

24. As to claim 19, the Bakshi-Pepe combination teaches the scheme of claim 1, however the Bakshi-Pepe combination does not explicitly teach a scheme with encryption using SSL for HTTP.

Grantges teaches a scheme for encryption using SSL for HTTP (col. 4, lines 23-32).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of the Bakshi-Pepe combination regarding the use

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of a proxy agent to contact an external proxy with the teachings of Grantges regarding the use of SSL for HTTP because SSL provides secure and fast messaging (Grantges, col. 4, lines 23-32).

25. As to claim 20, Grantges teaches a method wherein a proxy agent and an external proxy server require X.509 certificates (col. 6, lines 12-27).

26. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,345,300 to Bakshi et al. in view of U.S. Patent Number 6,621,827 to Rezvani et al..

27. As to claim 10, Bakshi teaches the method of claim 9; however Bakshi does not explicitly teach polling the external proxy server at regular intervals.

Rezvani teaches polling an external proxy server at regular intervals (col. 15, lines 25-37).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Bakshi regarding the use of a proxy agent to contact an external proxy with the teachings of Rezvani regarding polling at regular intervals because data may be waiting for a client at any time (Rezvani, col. 15, lines 25-37).

28. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,345,300 to Bakshi et al. in view of U.S. Patent Number 5,826,014 to Coley et al..

29. As to claim 14, Bakshi teaches the method of claim 9, however Bakshi does not explicitly teaching mapping ports to proxy agents.

Coley teaches a method of maintaining by an external proxy server maps between local TCP/IP ports of the external proxy server and private IP addresses on a protected network, the maps being distinguished by an identity of the proxy agent used to access them (col. 7, lines 35-63).

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It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Bakshi regarding the use of a proxy agent to contact an external proxy with the teachings of Coley regarding the mapping of ports to proxy agents because mapping a proxy agent to a particular port increases processing efficiency (Coley, col. 7, lines 51-54).

30. As to claim 15, Coley teaches a method of publishing by each proxy agent a list of addresses it can reach to an external proxy server, the external proxy server using this list to create a respective map between local ports and proxy agents (col. 9, lines 33-60).

31. As to claim 16, Bakshi teaches a method of ensuring cookie delivery (col. 3, line 31-col. 4, line 5).

32. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,345,300 to Bakshi et al. in view of International Application WO 00/68823 by Lawrence et al..

33. As to claim 21, Bakshi teaches the method of claim 9, however Bakshi does not teach rewriting cookies.

Lawrence teaches a method of rewriting cookies with unique identifiers to prevent inadvertent transmission of private information to an incorrect recipient on the protected network (page 2, line 19-page 3, line 7).

34. It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Bakshi regarding the use of a proxy agent to contact an external proxy with the teachings of Lawrence regarding the rewriting of cookies because rewriting cookies protects the identifies of surfers (Lawrence, page 1, lines 14-19).

Response to Arguments

35. Applicant's arguments filed 8/9/2005 have been fully considered but they are not persuasive. The applicant argues the following points: a) The Examiner has not identified a proxy agent located inside a protected network addressable by at least one internal network device; b) The proxy described by Bakshi is in contrast to the external proxy server recite in claim 1, which is addressable by both the proxy agent and external devices, but initiates contact with neither; c) The Examiner has not identified a proxy agent or an external proxy server reachable by the proxy agent through the firewall; and d) With regard to claim 9, the Examiner has not identified maintaining a proxy agent on protected network that polls an external proxy server for data addressed to an internal network device.

36. As to point a), looking at Figure 1, the firewall proxy from the previously cited portion of the reference is a proxy agent located inside a protected network addressable by at least one internal network device.

37. As to point b), there is no claim limitation that states that the proxy server does not initiate contact with the proxy agent and external devices. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

38. As to point c), the software running on the network firewall is considered a proxy agent and the network proxy is considered an external proxy server reachable by the proxy agent.

39. As to point d), the software on the network firewall relays requests to the http proxy for content. The claim language is non-specific to any polling details.

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Conclusion

40. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B. Blair whose telephone number is 571-272-3893. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas Blair

DBB



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER